Molecules and Cells



Supplementary Table S1. Select candidate genes by comparing gene expression in different culture conditions

 SARS seryl-tRNA synthetase MSTO1 misato 1, mitochondrial distribution and morpho PAPPA2 pappalysin 2 	ology regulator		
	ology regulator		
3 PAPPA2 pappalysin 2			
	pappalysin 2		
4 ARHGEF2 Rho/Rac guanine nucleotide exchange factor (G	Rho/Rac guanine nucleotide exchange factor (GEF) 2		
5 KCNT2 potassium channel, subfamily T, member 2	potassium channel, subfamily T, member 2		
6 ERO1LB ERO1-like beta (S. cerevisiae)	ERO1-like beta (S. cerevisiae)		
7 UNC5B unc-5 homolog B (C. elegans)	unc-5 homolog B (C. elegans)		
8 NUCB2 nucleobindin 2	nucleobindin 2		
9 CARS cysteinyl-tRNA synthetase			
10 HYOU1 hypoxia up-regulated 1			
11 MARS methionyl-tRNA synthetase			
12 ALDH1L2 aldehyde dehydrogenase 1 family, member L2	aldehyde dehydrogenase 1 family, member L2		
DNAJC3 DnaJ (Hsp40) homolog, subfamily C, member 3	DnaJ (Hsp40) homolog, subfamily C, member 3		
14 SEL1L sel-1 suppressor of lin-12-like (C. elegans)	sel-1 suppressor of lin-12-like (C. elegans)		
15 WARS tryptophanyl-tRNA synthetase	tryptophanyl-tRNA synthetase		
16 SNORD116-16 small nucleolar RNA, C/D box 116-16	small nucleolar RNA, C/D box 116-16		
17 CHAC1 ChaC, cation transport regulator homolog 1 (E.	ChaC, cation transport regulator homolog 1 (E. coli)		
18 HERPUD1 homocysteine-inducible, endoplasmic reticulum member 1	homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like domain member 1		
19 AARS alanyl-tRNA synthetase			
20 CDRT4 CMT1A duplicated region transcript 4	CMT1A duplicated region transcript 4		
21 MOCOS molybdenum cofactor sulfurase	molybdenum cofactor sulfurase		
22 CEBPG CCAAT/enhancer binding protein (C/EBP), gan	CCAAT/enhancer binding protein (C/EBP), gamma		
23 C5AR1 complement component 5a receptor 1	complement component 5a receptor 1		
24 SLC1A5 solute carrier family 1 (neutral amino acid transp	solute carrier family 1 (neutral amino acid transporter), member 5		
25 CGB8 chorionic gonadotropin, beta polypeptide 8	chorionic gonadotropin, beta polypeptide 8		
26 GFPT1 glutaminefructose-6-phosphate transaminase 1	glutaminefructose-6-phosphate transaminase 1		
27 IL1A interleukin 1, alpha	interleukin 1, alpha		
28 GPR1 G protein-coupled receptor 1			
29 PABPC1L poly(A) binding protein, cytoplasmic 1-like	poly(A) binding protein, cytoplasmic 1-like		
30 SDF2L1 stromal cell-derived factor 2-like 1			
	DnaJ (Hsp40) homolog, subfamily B, member 11		
32 LAMP3 lysosomal-associated membrane protein 3	lysosomal-associated membrane protein 3		
	small glutamine-rich tetratricopeptide repeat (TPR)-containing, beta		
34 SPDYE3 speedy/RINGO cell cycle regulator family mem	ber E3		
35 TCEA1 transcription elongation factor A (SII), 1			

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36	PSAT1	phosphoserine aminotransferase 1
37	PAEP	progestagen-associated endometrial protein
38	IARS	isoleucyl-tRNA synthetase
39	MT-TD	mitochondrially encoded tRNA aspartic acid
40	RPS6KA6	ribosomal protein S6 kinase, 90kDa, polypeptide 6
41	FAM129A	family with sequence similarity 129, member A
42	CLGN	calmegin

Supplementary Table S2. List of genes identified by microarray analysis as markedly enriched in NCI-H460 cells transfected with HYOU1 siRNA (SiHYOU1).

Log2Ratio1	Gene Symbol	Gene Description
2.993252	MX1	MX dynamin-like GTPase 1
2.954084	OAS2	2-5-oligoadenylate synthetase 2
2.7839865	IFIT3	interferon-induced protein with tetratricopeptide repeats 3
2.76579	IFIT1	interferon-induced protein with tetratricopeptide repeats 1
2.571722	IFI27	interferon, alpha-inducible protein 27
2.311319	IFI6	interferon, alpha-inducible protein 6
2.240972	IFI44L	interferon-induced protein 44-like
2.230919	IFITM1	interferon induced transmembrane protein 1
2.005804	SNORD113-8	small nucleolar RNA, C/D box 113-8
1.990765	GBP1	guanylate binding protein 1, interferon-inducible
1.969187	DDX60L	DEAD (Asp-Glu-Ala-Asp) box polypeptide 60-like
1.934284	IFIT2	interferon-induced protein with tetratricopeptide repeats 2
1.847849	DDX58	DEAD (Asp-Glu-Ala-Asp) box polypeptide 58
1.791231	MTRNR2L4	MT-RNR2-like 4
1.78864	GOLGA2P6	golgin A2 pseudogene 6
1.780715	IFIH1	interferon induced, with helicase C domain 1
1.729414	RSAD2	radical S-adenosyl methionine domain containing 2
1.662937	PARP9	poly(ADP-ribose) polymerase family member 9
1.633025	PARP14	poly(ADP-ribose) polymerase family member 14
1.61665	IFI44	interferon-induced protein 44
1.5863391	SLC35G6	solute carrier family 35, member G6
1.58186	RNU6-14P	RNA, U6 small nuclear 14, pseudogene
1.567021	IGHV3-38	immunoglobulin heavy variable 3-38 (non-functional)
1.534096	OASL	2-5-oligoadenylate synthetase-like
1.524359	STAT2	signal transducer and activator of transcription 2
1.520996	XAF1	XIAP associated factor 1
1.486252	TP53TG3D	TP53 target 3D
1.444503	TRBV5-4	T cell receptor beta variable 5-4
1.439716	PAGE5	P antigen family, member 5 (prostate associated)
1.439616	PLSCR1	phospholipid scramblase 1
1.431209	TRIM21	tripartite motif containing 21
1.416247	HERC5	HECT and RLD domain containing E3 ubiquitin protein ligase 5
1.405104	HIST1H2AA	histone cluster 1, H2aa
1.366573	BST2	bone marrow stromal cell antigen 2
1.361803	USP17L5	ubiquitin specific peptidase 17-like family member 5
1.3605884	ZNF100	zinc finger protein 100

Supplementary Table S3. List of genes identified by microarray analysis as markedly depleted in NCI-H460 cells transfected with HYOU1 siRNA (SiHYOU1).

Log2Ratio1	Gene Symbol	Gene Description
-2.232794	HYOU1	hypoxia up-regulated 1
-2.077372	POM121L7	POM121 transmembrane nucleoporin-like 7
-1.626501	CLEC4M	C-type lectin domain family 4, member M
-1.5840026	IFNA7	interferon, alpha 7
-1.428988	TEX35	testis expressed 35
-1.384743	KRTAP10-4	keratin associated protein 10-4
-1.350586	MALL	mal, T-cell differentiation protein-like
-1.34502	PIRC66	piwi-interacting RNA cluster 66